1. PURPOSE
1.1. Federal regulations require that research involving “vulnerable” populations such as pregnant women, human fetuses, neonates of uncertain viability, or nonviable neonates be reviewed under 45 CFR 46 subpart B. “Vulnerable” in the context of human subjects research protections does not refer to the susceptibility of harm, but rather the inability or a threat to the ability of an individual to give voluntary informed consent. When some or all the subjects are likely to be vulnerable to coercion or undue influence, the IRB must ensure that additional safeguards are in place to protect the rights and welfare of these subjects.

2. DEFINITIONS
2.1. Dead fetus, a fetus that exhibits neither heartbeat, spontaneous respiratory activity, spontaneous movement of voluntary muscles, nor pulsation of the umbilical cord.
2.2. Delivery, means a complete separation of the fetus from the woman by expulsion or extraction or any other means.
2.3. Fetus, is the product of conception from implantation until delivery.
2.4. Neonate, is a newborn.
2.5. Nonviable neonate, is a neonate after delivery that although living, is not viable.
2.6. Pregnancy, encompasses the period of time from implantation until delivery. A woman shall be assumed to be pregnant if she exhibits any of the pertinent presumptive signs of pregnancy, such as missed menses, until the results of a pregnancy test are negative or until delivery.

3. POLICY and PROCEDURE
Research Involving Pregnant Women or Fetuses
3.1. Pregnant women or fetuses may be involved in research if all of the following conditions are met:
A. Where scientifically appropriate, preclinical studies, including studies on pregnant animals and clinical studies, including studies on non-pregnant women, have been conducted and provide data for assessing potential risks to pregnant women and fetuses.
B. The risk to the fetus is caused solely by interventions or procedures that hold out the prospect of direct benefit for the woman or the fetus; or if there is no such prospect of benefit, the risk to the fetus is not greater than minimal and the purpose of the research is the development of important biomedical knowledge which cannot be obtained by any other means.
C. Any risk is the least possible for achieving the objectives of the research.
D. If the research holds out the prospect of direct benefit to the pregnant woman, the prospect of a direct benefit to both the pregnant woman and the fetus, or no prospect of benefit for the woman nor the fetus when risk to the fetus is not greater than minimal and the purpose of the research is the development of important biomedical knowledge that cannot be obtained by any other means, her consent is obtained in accord with the informed consent provisions of 45 CFR 46 subpart A.
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<tr>
<th>Special Considerations: Pregnant Women, Fetuses, and Neonates</th>
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E. If the research holds out the prospect of direct benefit solely to the fetus then the consent of the pregnant woman and the father is obtained in accordance with the informed consent provisions of 45 CFR 46 subpart A, except that the father’s consent need not be obtained if he is unable to consent because of unavailability, incompetence, or temporary incapacity or the pregnancy resulted from rape or incest.

F. Each individual providing consent under paragraph D or E above is fully informed regarding the reasonably foreseeable impact of the research on the fetus or neonate.

G. For children who are pregnant, assent, and permission are obtained in accord with HSC SOP 026 Special Considerations: Children.

H. No inducements, monetary or otherwise, will be offered to terminate a pregnancy.

I. Individuals engaged in the research will have no part in any decisions as to the timing, method, or procedures used to terminate a pregnancy.

J. Individuals engaged in the research will have no part in determining the viability of a neonate.

**Research Involving Neonates**

3.2. Neonates of uncertain viability may not be involved in research until it has been ascertained whether or not a neonate is viable or the following conditions are met:

A. Where scientifically appropriate, preclinical and clinical studies have been conducted and provide data for assessing potential risks to neonates.

B. Individuals providing consent are fully informed regarding the reasonably foreseeable impact of the research on the neonate.

C. Individuals engaged in the research will have no part in determining the viability of a neonate.

D. The IRB determines that either of the following conditions have been met:
   i. The research holds out the prospect of enhancing the probability of survival of the particular fetus to the point of viability, and any risk is the least possible for achieving the objects of the research.
   ii. The purpose of the research is the development of important biomedical knowledge which cannot be obtained by other means and there will be no risk to the fetus resulting from the research.

E. The legally effective informed consent of either parent of the neonate or, if neither parent is able to consent because of unavailability, incompetence, or temporary incapacity, the legally effective informed consent of either parent’s legally authorized representative is obtained in accord with 45 CFR 46 subpart A, unless altered or waived as approved by the IRB or except that the consent of the father or his legally authorized representative need not be obtained if the pregnancy resulted from rape or incest.

3.3. Nonviable neonates, may not be involved in the research unless all of the following conditions are met:

A. Where scientifically appropriate, preclinical and clinical studies have been conducted and provide data for assessing potential risks to neonates.

B. Individuals engaged in the research will have no part in determining the viability of a neonate.
C. Vital functions of the neonate will not be artificially maintained.
D. The research will not terminate the heartbeat or respiration of the neonate.
E. There will be no added risk to the neonate resulting from the research.
F. The purpose of the research is the development of important biomedical knowledge that cannot be obtained by other means.
G. The legally effective informed consent of both parents of the neonate is obtained in accord with 45 CFR 46 subpart A, except that the waiver or alterations provisions do not apply. If either parent is able to consent because of unavailability, incompetence, or temporary incapacity, the informed consent of one parent of the nonviable neonate will suffice, except that the consent of the father need not be obtained if the pregnancy resulted from rape or incest. The consent of a legally authorized representative of either or both of the parents of a nonviable neonate will not suffice to replace the consent of a parent.
H. Each individual providing consent is fully informed regarding the reasonably foreseeable impact of the research on the neonate.

**Research Involving, after Delivery, the Placenta, the Dead Fetus, or Fetal Material**

3.4. Research involving, after delivery, the placenta, dead fetus, macerated fetal material, or cells, tissue, or organs excised from a dead fetus shall be conducted only in accord with any applicable federal, state, or local laws and regulations regarding such activities.

3.4.1. Laws periodically change, and laws do vary from state to state. Investigators conducting research outside of California should be familiar with the applicable requirements of the state or country where the research is to take place.

3.5. If information associated with the material above is recorded for research purposes in a manner that living individuals can be identified, directly or indirectly through identifiers linked to those individuals, those individuals are research subjects and all pertinent regulations apply.

**Research Not Otherwise Approvable which Presents an Opportunity to Understand, Prevent, or Alleviate a Serious Problem Affecting the Health or Welfare of Pregnant Women, Fetuses, or Neonates**

3.6. The Secretary will conduct or fund research that the IRB does not believe meets the requirements of 3.1 or 3.2 above only if:
A. The IRB finds that the research presents a reasonable opportunity to further the understanding, prevention, or alleviation of a serious problem affecting the health or welfare of pregnant women, fetuses or neonate; and
B. The Secretary, after consultation with a panel of experts in pertinent disciplines (e.g., science, medicine, ethics, law) and following opportunity for public review and comment, including a public meeting announced in the FEDERAL REGISTER, has determined either:
   i. That the research in fact satisfies the conditions of 3.1 above, as applicable; or
   ii. The following:
a. The research presents a reasonable opportunity to further the understanding, prevention, or alleviation of a serious problem affecting the health or welfare of pregnant women, fetuses, or neonates;

b. The research will be conducted in accord with sound ethical principles; and

c. Informed consent will be obtained in accord with the informed consent provisions of 45 CFR 46 subpart A and other applicable requirements.

### Inclusion or Exclusion of Pregnant Women in Research

3.7. In most instances at UCSB, research projects target a wide population including women that may coincidentally be pregnant, but are not the target study population. For example, minimal risk research involving interviews, surveys, oral histories, online questionnaires, and other social, behavioral, and educational research, as well as research that does not intend to develop important biomedical knowledge that is not addressed in the federal regulations. The IRB recognizes in instances such as these, that the research may not present additional risks to participants who are or may become pregnant.

3.7.1. When these types of extra-regulatory circumstances apply, the IRB can consider approving the research if the study is not federally funded and will consider the research in light of the inclusion of pregnant women. The IRB may waive some or all of the federal requirements for non-federally funded research on a case-by-case basis or even for certain classes of research as deemed appropriate to the risks.

3.8. Investigators should consider any conditions for inclusion or exclusion criteria of pregnant women who may be encountered during the study enrollment. The consent form must identify any known risks to the participant and if the risks are not known because there is little experience in pregnant women, the consent form and informed consent process, must clearly say so.

3.8.1. If pregnant women are excluded from the study, the application should describe the risks that require exclusion, or if applicable, state that pregnancy is exclusionary based on a lack of knowledge of the known risks.

### 4. SCOPE

These policies and procedures apply to all human subjects research conducted by investigators affiliated with UCSB.

### 5. RESPONSIBILITY

The IRB staff are responsible for an initial review of all research protocol applications as described in HSC SOPs 014 and 017 – Initial Review and Continuing Review.

The IRB staff and Research Integrity Office are responsible for ensuring that IRB members are apprised of new and evolving regulations and guidelines pertaining to vulnerable populations, for selecting discussion leaders with appropriate expertise to conduct the reviews of such research.
The IRB reviewers are responsible for conducting an appropriate review of research planned for vulnerable populations, including an assessment of potential coercion, in consultation with any appropriate experts and resources as needed.

6. PROCESS OVERVIEW

6.1. Proposed research involving vulnerable populations must take special precautions to ensure that the research participants’ rights, safety, and welfare are safeguard against any risks.

6.2. IRB members must take in consideration subpart B of the federal regulations and any other applicable federal, state, or local laws when reviewing research involving pregnant women, neonates, and/or fetuses.

6.3. When evaluating the proposed research, the IRB members will ensure that the protocol contains the appropriate informed consent processes and will identify any additional potential risks and safeguards needed to protect the participants’ rights, safety, and welfare.

6.4. The IRB staff will communicate any requests for revisions or clarifications requested by the IRB before final approval of the research application.

References:
45 CFR 46 Regulations
UC Berkeley Policies and Procedures
Belmont Report – Ethical Principles and Guidelines for the Protection of Human Subjects Research